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## ORIGINAL COMMUNICATIONS.

### ON THE TREATMENT OF BRIGHT'S DISEASES OF THE KIDNEY.

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ALTHOUGH the line of demarcation in the treatment of the different forms of Bright's disease is by no means so sharp as that which modern histology has made in their pathology, it will, nevertheless, facilitate our consideration of the subject, as well as perhaps tend to place treatment on a more rational basis, if I preface a brief recapitulation of the different forms alluded to.

1. In the first place, we have the division into *acute* and *chronic* Bright's disease. The former presents us with a single form, that of *acute nephritis*, the acute tubal nephritis, acute catarrhal and acute desquamative nephritis of certain authors,—which has its most frequent occurrence as a sequel of scarlet fever, and therefore in children; while it also occurs less commonly in adults after exposure, especially while perspiring, to cold and moisture. It is indicated by the presence of dropsy, bloody highly albuminous urine, containing blood-casts and epithelial casts, also sometimes hyaline fibrinous casts.

2. Secondly, we have chronic Bright's disease, which gives us four subdivisions. The first of these is the *large white kidney*, also called chronic catarrhal nephritis, and chronic tubal nephritis, because it involves more particularly the cells lining the uriniferous tubules, and is generally found in continuation of the acute nephritis. The condition, while one of increased nutrition, a true hypertrophy in its earlier stages, and a fatty degeneration in its later contracting stage, cannot be considered an inflammatory one; and therefore I prefer the term *large white kidney* to any involving the idea of inflammation.

In this form of disease we have also dropsy, considerable albumen, at first small hyaline casts, containing an occasional oil-globule or fragment of epithelium, later more copious urine and more numerous small hyaline and oily casts, and finally large hyaline, granular, and oil casts, indicating destruction of the gland, the rate of which may be estimated by the quantity of this kind of deposit.

Next we have the *cirrhotic* or chronically contracted kidney, also called the gouty kidney, and by the German pathologists the kidney of interstitial nephritis, in contradistinction to the catarrhal nephritis, because the interstitial connective tissue is believed to be the seat of the inflammation. Here again I do not think the phenomena are those of a true inflammation, but rather of a nutritive activity in the normally scanty connective-tissue elements between the tubules, to the resulting fibrillar element of which is also contributed a portion derived from the atrophy of the tubules themselves. A hypertrophy of the muscular coats of the arterioles of the kidney, and perhaps, also, as claimed by Johnson, of the entire arterial system, is also an essential feature.

For the above reasons I prefer, also, to speak of this kidney as cirrhotic or contracted, its small size and hardness being more conspicuous than inflammatory phenomena. In this form there is little or no dropsy; there is an increased amount of urine, with a minute amount of albumen, sometimes, perhaps, not a trace of it; also granular and hyaline casts.

Third, is the *albuminoid* kidney, also called the bacony (*speckige*), waxy, or amyloid kidney, the latter term having been applied by Virchow in consequence of an erroneous conception of the nature of the infiltrating substance, he having supposed it to be allied to the starches.

The essence of the disease consists in an infiltration, first of the walls of the blood-vessels, and finally of the tubules and cells themselves, with this peculiar substance, of which the exact composition is still unknown, but which is certainly albuminoid and not starchy in composition. The effect of the infiltration is to give a peculiar glistening translucency to the parts affected, and to impart to them the property of striking a bright mahogany-red color with a solution of iodine.

The disease is commonly found attending an exhausting drain upon the system, whether from local or constitutional disease, and it is highly probable that one of these causes is the extreme albuminuria which attends the large white kidney, so that we find the latter organ often the seat of a secondary albuminoid disease of the capillary blood-vessels. Except under these latter circumstances, albuminoid disease of the kidney is generally accompanied by similar disease of the liver and spleen, which are also enlarged, and by this condition aid in the diagnosis. In this affection the amount of urine is large and correspondingly pale; the amount of albumen, at first small, gradually increases; casts are often absent, and when present are not numerous, and they are usually small, hyaline, and granular, and occasionally oily. Later, we have the same large-sized hyaline and granular casts described as occurring in the large white kidney; and from the latter form of disease it is often impossible to distinguish the waxy kidney before death. Sometimes the casts in albuminoid disease exhibit the waxy lustre of the albuminoid infiltration, and strike also the red mahogany-color with iodine.* But this is by no means invariable, or we would have a means of easy diagnosis.

Finally, there undoubtedly sometimes occurs a pure and simple fatty degeneration of the cells of the kidney, often associated with general fatty infiltration of all the tissues, and especially of the liver and heart, in very fat persons, consumers of

* Care should be exercised to use a watery solution of iodine in testing these casts under the microscope, as an alcoholic solution precipitates the albumen and obscures the field.

alcohol, or the subjects of wasting diseases like cancer and phthisis.

TREATMENT.

It is to be regretted that the advance in the therapeutics of Bright's disease has not been as great as in its pathology; and yet, that treatment is often of the greatest utility, not only in alleviating the suffering and prolonging the life of the patient, but also in promoting recovery, is attested by numerous instances. As already stated, the treatment of the different forms of the disease is by no means so distinctive as their pathology, and, for practical purposes, a division of the treatment into that for the acute and that for the chronic is sufficient, provided that attention be also called to any special modification of treatment required by special conditions.

*Treatment of acute Bright's disease.*—First, as to the treatment of the acute form. There is no doubt that many cases recover while the conditions of rest, quietude, and warmth are maintained. And it is further certain that, whatever other means of treatment are used, these three conditions are absolutely necessary to recovery. A patient with acute Bright's disease, therefore, whatever its mode of origin, should be put to bed, kept quiet, and warmly covered. I should seldom, however, be satisfied with this mode of treatment alone. The selection of other remedies will depend somewhat upon the severity of the case. If the urine be suppressed, dry cups, or even wet cups, to the loins will so divert the blood as to permit a relief to the stagnation which always exists in the acutely inflamed kidney. These cups should always be followed by a warm, moist poultice to the same region, which, indeed, should be used under any circumstances, whether the cupping is necessary or not. I am in the habit, therefore, of always resorting to poultices, and, if the symptoms are at all severe,—that is, where there is complete or almost total suppression of urine, nausea, headache, or delirium,—of preceding them by cupping. Although at first thought it would seem that the kidneys are quite remote from the seat whence the blood is immediately removed, it must be remembered that we are relieving the blood-pressure in the lumbar arteries which come off from the aorta near the renal arteries, and thus divert the blood from the latter. Under all ordinary circumstances dry-cupping is sufficient; wet-cupping should be reserved for the most extreme symptoms, where the strength of the patient has not been previously reduced. Some care must, however, be exercised in the use of dry-cupping, lest we defeat its end. The object of dry-cupping, as justly observed by Dr. G. Johnson, is to facilitate the movement of the blood through the capillaries into the veins,—to draw the blood rapidly through the part, and thus relieve the pressure of the blood in the renals. To do this, the cups must be removed as soon as there is a decided redness, and placed on another part in the vicinity. By allowing them to remain too long, the blood is stagnated in the capillaries, its onward movement prevented, and there is, therefore, no derivation of blood from the involved organ.

The above means have for their object the direct relief of the congestion of the kidney. This is not the only indication while the kidney is congested. The congestion, in some instances, is altogether due to an excess of work thrown upon it in consequence of suppressed or deficient action of the skin, and in all cases the carrying out of the natural function of the organ tends to increase any existing congestion. Can the kidney be in any way relieved of this functional irritation? Is there any organ which, in other words, can supplement the kidney? Such an organ is the skin. A second indication, therefore, is to excite the action of the skin. And in fulfilling this lies the advantage already referred to from the maintenance of warmth and avoidance of cold early insisted upon. But we are not confined to these protecting measures. The skin may be made to do the work of the kidney itself, and thus one of the most alarming dangers of Bright's disease, uræmic intoxication, averted, while at the same time the congestion of the kidney is also relieved.

The class of remedies which produce this action are diaphoretics; and, of the internal remedies, none is better than the ordinary sweet spirit of nitre, especially if it be combined with small doses of ipecacuanha. But a more effectual and certain method of accomplishing the same end is by warm baths, or, better still, by the so-called warm or "cold pack," in which the patient is wrapped in a wet sheet and then enveloped in a sufficient number of blankets. Perspiration is thus copiously induced, and when thus caused is agreeable, and never attended by the faintness which sometimes follows the use of the hot-air bath,—another means of accomplishing the same end, which will be further considered under the treatment of chronic Bright's disease. In an ordinary severe case of acute Bright's disease, a single pack of this kind will remove all symptoms which may cause anxiety, and happily inaugurate the convalescence, while it may be repeated daily, if necessary.

We may resort to purgatives to the same double end, that of relief of congestion and a complemental action of secretion, and to a certain extent these should always be employed. But the reason for which I primarily employ a purgative is less for either of these objects than for one which I deem even more essential, and that is to promote the action of other remedies, a purpose which applies not only to the treatment of Bright's disease, but also to all diseases. It is a well-known fact in the absorption of fluids, which is borne out by the phenomena of osmosis, that this does not take place rapidly when the blood-vessels are congested and there is a slowly-moving current.

The beautiful experiment of Magendie, which consisted in injecting into the peritoneal cavity a colored fluid, which at first was not appreciably absorbed, but which, on opening a blood-vessel, disappeared rapidly before his eyes, is sufficiently to the point in illustration. The treatment of any case of acute Bright's disease is therefore well commenced by the use of a cathartic, and after its effect the prompt action of other remedies may be looked for. Indeed, it is quite useless to administer diu-

retic remedies before some action is obtained from the bowels, as they will be many hours in producing their effects; whereas after such influence they will be as many minutes. Beyond this end I am not in the habit of giving purgatives in ordinary cases of acute Bright's disease. But there is a condition in which the eliminative action already referred to is often of signal service, and that is the one of uræmic coma and convulsions. Under these circumstances, when the patient cannot be made to swallow, and decided and prompt effect is desired, a couple of drops of croton oil on the tongue have many times saved life by inducing prompt and decided purgation.

Nothing has been yet said of the use of diuretics, which are, perhaps, the first means thought of by most practitioners in the treatment of Bright's disease, acute or chronic, and, no doubt, in many cases they deserve an early consideration. Yet the propriety of their use has been much disputed, and at first thought there would seem to be legitimate objection to them in the treatment of acute nephritis, for with the idea of increased secretion of urine is generally associated that of an increased flow of blood to the kidney. And the question naturally arises, Shall a kidney already congested and inflamed be further jeopardized by crowding more blood into it? On the other hand, it is well known that convalescence in a case of acute Bright's disease which has been left to recover without treatment is always ushered in by a most copious diuresis. This is usually explained by the fact that urea itself is a decided diuretic, as may be shown by injecting it into the blood-vessels of any animal, —an operation which is followed by copious diuresis. In the early stages of Bright's disease the urea and other organic constituents are retained in the blood, and when the circulation through the kidney becomes free, they exert their diuretic action. It will be observed, however, that this takes place only after the circulation becomes free, and it must be looked upon, therefore, not so much as a cause as a result of an improvement in the condition of the organ. Nevertheless, to facilitate such a condition of affairs as copious secretion of urine, and with it the elimination of those effete matters the accumulation of which constitutes the chief danger of Bright's disease,—uræmia,—can only be considered desirable if it can be done without exciting congestion of the kidney. The secret in the proper use of diuretics lies in the selection of such as effect their object without producing a congestion; and such there are. To understand this properly, it must be recalled that the secretion of urine is largely a process of filtration, a process of squeezing out the water and dissolved elements by pressure from behind, and that this is accomplished in the Malpighian bodies by the agency of the arterial pressure and the force of contraction of the heart. It must be remembered that there are two sides to the renal capillary circulation, an *arterial* side and a *venous* side. The first consists in the afferent arteriole and the capillary ball contained in the dilated end of the convoluted tubule and forming with the latter the Malpighian body; the second, of the capillary net-work formed by the splitting up of the efferent vessel after it leaves the Malpighian capsule and closely embraces the convoluted tubules. The area of this is great, and the movement of the blood slow. As a consequence, a condition favorable to increasing the blood-pressure in the Malpighian body exists. Such pressure is obtained by increasing the force of the heart's contraction, or increasing the arterial pressure by the introduction of fluids within the blood-vessels. The effect of this is to produce a more rapid filtration; that is, more water is squeezed out from the blood-vessels into the Malpighian capsules, whence it is carried downward in the tubules. Now, whatever remedies increase the force of the heart's action or the arterial pressure by absorption of fluids will increase the amount of water thus filtered out. Such remedies are digitalis, the salines, and diluent drinks generally,—digitalis by increasing the force of the heart's action, the salines and diluents by increasing blood-pressure through their absorption. Digitalis is certainly the diuretic most to be relied upon, and when combined with the salines, freely diluted, affords a powerful lever for good. It is necessary, however, to have a reliable preparation, and unless one is sure of the quality of the tincture it is best to use a freshly-prepared infusion. At the same time it is also true that much smaller doses of the tincture are usually given than of the infusion. Thus, of the latter, f℥ss is often administered, equivalent to three and three-quarter grains, while eight minims or sixteen drops of the tincture, equivalent to one grain of the powder, are considered a full dose, a discrepancy which must account for at least a portion of the diminished effect of the tincture. Digitalis should therefore be given in sufficient quantity,—f℥i of the infusion to children, and f℥ss to adults,—repeated every three hours until an appreciable effect is produced on the rate of the pulse, when it should be diminished. Not until then can you look for a diuretic action. Digitalis, when thus administered, should, of course, be watched, and the patient should be seen twice a day until an effect is produced. Of the alkalies with which it may be combined, acetate of potassium and citrate of potassium are to be preferred. Their diuretic action doubtless depends upon the impetus they give to the osmosis of fluids which hold them in solution, thus increasing the arterial tension and contributing to the flushing of the kidney. Half a drachm of the potash should be given every two or three hours to adults, and ten grains to children. There can be no doubt that an increased filtration of water into the Malpighian capsules aids the separation of the organic constituents in the second capillary net-work referred to, both by facilitating osmosis on the principle of the more rapid current, and by washing out of the secreting cells of the convoluted tubules the organic matter already excreted by them.

By such means as these, after the unloading of the blood-vessels by the action of a purge, we may greatly serve our patient through diuretics. On the other hand, turpentine, cantharides, copaiba, and the class of diuretics which produce a congestion and stagnation of blood in the second or venous

capillary net-work, are mischievous, and should not be employed.

It should not be omitted to mention that fomentations of a strong infusion of digitalis (℥i to a pint) applied to the abdomen or lumbar region are often efficient in producing diuresis when other means fail.

*Treatment of chronic Bright's disease.*—There is always an intermediate stage between that of acute nephritis and the condition of the large white kidney from which recovery often takes place, which calls for a modification of or an addition to the treatment described for the acute, and which is indicated by an impaired quality of the blood, due partly to the gradual accumulation of effete matter, and partly to the drain upon the system which a copious albuminuria certainly induces. But, as it is a condition growing out of the prolonged presence of the disease, it is practically covered in the treatment of the chronic form, and requires therefore not to be separated from it.

The chief indications in the treatment of the chronic forms of Bright's disease are two: *first*, to improve the quality of the blood, which has become anæmic and loaded with urea and allied organic compounds; and, *second*, to combat the symptoms and complications which form a source of great inconvenience, and even danger, to the patient.

The first of these indications is chiefly fulfilled by the use of iron, quinia, and strychnia, nourishing food, and proper hygienic influences; and also by depurating the blood of its retained urea. The well-known Basham's mixture, really a solution of acetate of iron, made by adding to tincture of the chloride acetic acid and the solution of the acetate of ammonia, has the advantage of at least tending to eliminate, while it also restores. But the tincture of the chloride alone is a powerful agent which is always accessible, and, when combined with the sweet spirit of nitre, is perhaps as efficient as the Basham's mixture. To either, the quinia and strychnia may be added if desired; while to the latter the infusion or tincture of quassia makes a compatible addition.

With regard to *food*, while it is true that an abundance, and of good quality, is desired, a question has properly arisen as to the propriety of using the highly nitrogenized substances, as animal flesh. It is now well determined that the urea formed in the blood and eliminated in the kidneys is derived chiefly from the azotized elements of the food, and that the more nitrogenous food we consume the more work is thrown upon the kidneys; although here too the question is somewhat different if we suppose the separation of the urea a matter of mere filtration, or one of elaboration. But either supposition involves an increased flow of blood to the organ; and, although I cannot speak from any certain knowledge that disadvantage results from the free use of nitrogenous food, I feel that the probabilities from theoretical reasoning are sufficiently strong to make it proper for us to be influenced in practice by them. While, therefore, it is not desirable to omit all such food, it *is* desirable to limit it to moderation, and, while drawing elements of mixed food from the vegetable kingdom, to make up the deficiency in meats by the free use of milk. There is reason to believe the milk-treatment of cases of Bright's disease to have been of signal advantage in certain instances, and it is not unlikely that it depends upon the smaller proportion of nitrogen contained in it, compared with a corresponding quantity of meat.

Under hygienic measures are included a proper use of clothing and exercise. That the former next to the body should be of *wool* is absolutely essential. For it must be remembered that, on the one hand, the skin is a powerful adjuvant to the kidney in its eliminating operations, and, on the other hand, that any interference with or suppression of the action of the skin must throw more labor on the kidney. Cold is the agent which produces such suppression, and warmth the means by which the action of the skin is encouraged; and no texture prevents the former or secures the latter more effectually than wool.

For the same reason, while the maximum amount of fresh air is desirable, cold and dampness should be avoided or sufficiently guarded against. Many a case of chronic Bright's disease, often previously undiscovered, has been brought to its fatal termination by the action of cold, and especially of cold and moisture combined. Hence, too, there is no doubt that residence in a warm and equable climate is often of signal service in cases of chronic Bright's disease; and cases are reported where albumen has disappeared and recovery apparently taken place in a warm climate, where their previous duration was such as to make recovery highly improbable.

It is doubtful whether other measures than the above are necessary in cases of *contracted kidney*, where the external symptoms of the disease are often so trifling that they have never been observed by the patient; while the discovery of the presence of the disease is often accidental, as where the patient consults his physician for an inexplicable weakness, and the latter in exploring the case discovers albuminuria and casts. In these cases the complication of dropsy seldom occurs; and the extent to which life may be prolonged by suitable care may only be limited by its natural termination. On the other hand, such a person, with the disease undiscovered and uncared for, is in hourly danger from the uræmic intoxication which a shower of rain or a period of unusually prolonged mental and bodily fatigue may cause.

It is more particularly in the *large white kidney*, and the later stages of the *albuminoid organ*, that more decided measures are called for to depurate the blood of its accumulated impurities, as well as to combat the symptoms which cause inconvenience or jeopardize life. These symptoms are those of dropsy, effusions into the serous cavities, and congestions. Such patients are usually confined to the house, or go out of it at such great inconvenience as to make it intolerable to do so. Of dropsy there is abundant evidence to the naked eye; but of the necessity of depuration there is unfortunately no direct means of estimation except by a volumetric analysis of urine, which involves so much trouble and care as scarcely to be possible to the general

practitioner. Fortunately, however, the means which are best calculated to relieve the one are most likely to relieve the other. These measures are, in addition to diuretics, such as promote a more decided action of the skin than any yet alluded to, and certain purgatives.

With regard to diuretics, nothing need be added to what has been already said, bearing in mind that digitalis is our most powerful lever. But with regard to measures which promote a decided action of the skin, I desire to add a little more. These are the "warm pack-bath," and the hot-air bath already alluded to. The latter, in consequence of its more ready application, is to be preferred whenever it can be borne. I have recently, in my wards at the Philadelphia Hospital, used considerably the hot-air bath, and made some observations to determine its value; the results of which satisfied me that we have a much more useful agent than many of us have suspected. A patient with large white kidney was under my observation for more than a year. During a portion of this time his urine was carefully measured, and a portion of the twenty-four-hours' urine analyzed for urea by Liebig's volumetric process, which was repeated to insure accuracy. He was a very large man, passing copiously of urine, and the quantity thus arrived at was 540 grains; the total quantity of urine being 2000 cubic centimetres (66⅔ f℥). He was then ordered a hot-air bath daily, during which he perspired most freely. The twenty-four-hours' urine was of course diminished; but on estimating the urea in the twenty-four hours after the sweating had been continued three days, it was found to be 714 grains in 1700 cubic centimetres (56⅔ f℥) urine,—actually an increase over the amount secreted when not under the baths. This can be accounted for by the increased celerity of the circulation which would naturally result. If we add to this the amount of urea contained in the increased perspiration, which was of course not determined, on account of the difficulties of collection, we will perceive how powerful a means of depurating the blood of its urea is thus at our disposal; and I am quite certain that if the use of the hot-air bath were more common our power over Bright's disease would be greater. There is a common impression that it is troublesome and difficult of application. But this is not the case, as may be seen by the apparatus I exhibit, being that in use at the Philadelphia Hospital. Sometimes, however, these hot-air baths are not well borne by patients; they do not perspire, and the head and face become flushed, and the former throbs and aches. Under these circumstances the warm pack already described may be used instead.* It is perhaps equally efficient, but is more troublesome. It may be objected that these means are exhausting to the strength of the patient; but I think they will be found less so than is commonly supposed; the strength of the patient may, however, at the same time be maintained by iron, tonics, and milk.

* Since reading the paper, a member of the Society has suggested the propriety of tying a wet handkerchief about the head, as is done in the Turkish bath, with a view of preventing these unpleasant head-symptoms; and it is not unlikely that it would prove an efficient agent.

The use of *purgatives* for depurative purposes and to reduce the dropsy has long been common in the treatment of chronic Bright's disease, and to this end it has been common to select a peculiar class of purgatives, viz., those which produce profuse watery evacuations, as elaterium, scammony, gamboge, and jalap. In addition to the indications to relieve general venous congestion with a view to promoting absorption, the advantage to be derived from the use of a brisk, prompt cathartic has already been alluded to in speaking of the treatment of acute Bright's disease. But it must be remembered that in the circumstances now under consideration it is not a temporary cause the effects of which we desire to obviate, but a constantly acting one, so that to be of service the purgative must be continued day after day, or every other day at least. Now, such use of the hydragogue cathartics above mentioned cannot be continued for any length of time without materially reducing the strength of the patient much more decidedly than through the daily sweat. I do not deny their effect in diminishing the dropsy. On the other hand, I have many times observed this effect, and in some I have observed the dropsy totally disappear,—but with it the strength of the patient to such an extent that as the dropsy subsided the life of the patient went out with it, so that it might truly be said that had the patient lived a little longer the dropsy would have been cured. I am not, therefore, very partial to the continued use of cathartics in chronic Bright's disease. But it must be remembered that it is to the prolonged use that I refer. To relieve a sudden emergency, as the occurrence of uræmic symptoms, —in a word, under the same circumstances under which I would use them in *acute* Bright's disease if they could be administered, would I give them. Of the remedies mentioned, undoubtedly the one which most strikingly produces the desired effect is elaterium. The profuse painless discharges which it effects in doses of one-twelfth to one-sixth of a grain are well known, while the small quantity required makes it peculiarly easy of administration.

But in most cases of chronic Bright's disease, except the chronically contracted kidney, a stage is finally reached at which all treatment of the kind described fails to relieve the dropsy, which becomes eventually the sorest burden of the malady. The body becomes greatly increased in weight, the integument of the extremities is stretched almost to bursting, and sometimes it does rupture, when it is attended by a leakage, which, although in one way inconvenient, is in many senses a great relief to the patient, by diminishing the tension referred to. Acting upon this, physicians have long been in the habit of puncturing the swollen parts to produce the required leakage. In my early experience I once had such horrible results in the sloughing away of the entire scrotum of a little child with scarlatinal nephritis, after I had punctured it, that I declared I would never repeat it. But as other cases came under my observation my prejudices thus excited gradually disappeared, and I now resort to puncture when it seems likely to give relief. It only remains to determine the best method of per-

forming the operation. It is a common practice to make a number of minute punctures with a needle or sharp-pointed bistoury. Dr. George Johnson, of London, recommended making a free incision half an inch long, just above the outer or inner ankle of each leg, and deep enough to enter the areolar tissue beneath the skin. This may be done with a bistoury; but Dr. Johnson used an instrument mounted like a spring-lancet, which he recommends as more efficient and less painful than the repeated fine punctures. He relates an instance which is so remarkable and so admirably illustrates the possibility of recovery when the symptoms have reached an advanced stage, that it is quite worthy of re-narration. In July, 1861, he saw a clerk, aged 22, who had suffered from general dropsy since the end of March, after exposure to cold. The urine became nearly solid with acid and heat, while it *contained numerous oily casts*. Purgatives and diuretics failed to lessen the dropsy, and at the beginning of September the swelling was so great that the skin cracked and water oozed through the fissures. The legs were now incised; a copious discharge of water occurred, and the urine became more copious. From that time he steadily improved; the dropsy passed away, and gradually the urine ceased to be albuminous; but it was not until the end of April, 1862, more than a year from his illness, that all traces of albumen had disappeared. The chief medicinal treatment after the incision of the legs was the use of tincture of perchloride of iron three times a day, and a dose of broom-tea in the morning. Such recoveries as this are rare, while their possibility shows the value of hopeful perseverance in treatment. I have never seen the instrument referred to, but have made the large incisions with satisfactory results, although I can point to none so satisfactory as Dr. Johnson's.

With regard to specific methods of treatment, none are of any avail, and, so far as they ignore special indications, they are mischievous. I have heard of calomel being used for long periods to the production of its specific effects,—for what object, except to hasten the blood-dyscrasia which is the ultimate cause of death, I cannot say. It requires to be mentioned only to be deprecated.

The use of *opium* requires to be alluded to. The caution which has always been suggested in its use I believe to be in the main a wholesome one, and I should prefer to produce hypnotic, sedative, and antispasmodic effects by chloral and the bromides whenever it is possible. I am sure I have seen death accelerated in one case of previously unsuspected chronically contracted kidney in which large doses of opium were exhibited for another purpose,—overdoses, in fact, but quite insufficient of themselves to produce the fatal result, which was preceded by uræmic stupor. After death the urine was drawn by a catheter and found to be albuminous, and a post-mortem examination revealed a contracted kidney. On the other hand, I would not omit the use of opium where there was decided indication for its use to allay pain. It is well known that Professor Loomis, of New York, treats with apparent success cases of uræmic convulsions with hypodermic injections of large doses of morphia (one-half grain or more),—doses which I would fear to use under ordinary circumstances in the absence of renal disease. A method, however, suggested by so high an authority as Dr. Loomis merits a trial, which I should be glad to give it under appropriate circumstances.

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## CROUP AND DIPHTHERIA.

BY JOSEPH G. RICHARDSON, M.D.,
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ALTHOUGH the doctrine of the identity of these two diseases has been ably combated by my friend Dr. H. Hartshorne in the *Medical Times* for June 27, yet so pernicious does this error, as I deem it, appear to be, that I feel impelled to add a few words to his testimony. The obvious dissimilarities, and, indeed, contrasts existing between croup and diphtheria, are so evident in marked instances that I can only account for an observer of even average ability confounding them, by supposing that he has fortunately met with the latter malady infrequently, and then in a mild form and as a chiefly local manifestation. To one who has been called upon to treat hundreds of cases almost every winter, as I was obliged to do near my former residence in Cayuga County, New York, the mistake seems on any other supposition quite inexplicable.

In several of my fatal cases there was no croupy cough, no suppression of the voice, and no distressing dyspnœa,—death occurring from simple asthenia; in one of which I have notes, the hoarse cough, indicating the supervention of croup, came on only twelve hours before death, when the patient was actually moribund, and after the whole faucial region, and even the roof of the mouth, was thickly coated with false membrane; whilst in another, upon which I performed tracheotomy, the symptoms of croup supervened on the sixth day, ninety-six hours before the fatal issue.

The most conclusive example I can bring forward, however, is that of a child some three years old, who was treated so severely for diphtheria by rubefacients to the neck as to produce vesication. When the little patient succumbed, several days afterwards, the pharynx and larynx were *quite clear of deposit*, but the abraded surface around the neck exteriorly *was thickly covered with diphtheritic membrane*. I did not see this patient myself, but his condition was minutely described to me by three eye-witnesses, viz., the father of the child, the irregular practitioner in attendance, and a neighbor who sat up with the little sufferer, and who, by the way, took the disease, and was very ill with it under my care for more than a week, but finally recovered. I am satisfied that the affected infant presented the phenomena just narrated, and have always felt we could hardly hope to obtain a more conclusive proof of the difference between pseudo-membranous laryngitis and true uncomplicated diphtheria.

The characteristics upon which my experience has taught me to rely chiefly in making a differential diagnosis between these two maladies are, besides

the aspect and seat of the false membrane,—1, the astonishing and immediate prostration of strength in diphtheria; this I have seen profoundly marked before any throat-affection was manifest; 2, the comparatively low temperature, as detailed in my paper on Diphtheria, in the *New York Medical Record*, quoted by Flint in his Practice of Medicine, p. 940, and Wunderlich, Clinical Thermometry, p. 368; 3, the strong contagiousness of diphtheria, which I have seen exemplified in scores of instances; 4, the fact that diphtheria is common in adults, whilst croup is extremely rare; and 5, the therapeutic test of the remarkable control which chlorate of potassium and tincture of chloride of iron exercise upon most cases of diphtheritic complaints. Lastly, the subsequent appearance of the curious forms of diphtheritic paralysis may enable us to solve the problem in some doubtful cases.

1835 Chestnut Street, Philadelphia.

## NOTES OF HOSPITAL PRACTICE.

### KING'S COLLEGE HOSPITAL, LONDON.

*SERVICE OF SIR WILLIAM FERGUSSON, BART.*

Reported by John B. Roberts, M.D.

*TENOTOMY FOR THE RELIEF OF TALIPES EQUINUS.*

THIS boy, aged 16, presents a well-marked case of a very common distortion of the foot, namely, talipes equinus; that is, the heel is drawn up, and he walks upon his toes. Deformities of the lower extremities have, no doubt, always been common, but the remedy is of recent date, for it is not many years since the operation of tenotomy for the cure of club-foot was looked upon as a great novelty and was the source of much curiosity. In this instance, as you see, the left heel is drawn up and the foot turned somewhat inward, while the toes, especially the first and fourth, are pulled up by the extensor muscle. At the same time the calf of the left leg is smaller than that of the right, and has a wasted appearance.

It would appear as though the tendo Achillis were at fault in these cases; but this is not necessarily so, for the distortion is probably due to the calf-muscles, and not to a short tendon, though in the treatment we usually divide the tendon in order to let the heel come down.

In this case, the tendons of the extensor digitorum shall first be divided, to allow the toes to be straightened, which is readily done by introducing the tenotome and cutting subcutaneously the tendon going to the great toe and that of the fourth toe, since the other toes do not demand the operation. Then the foot is grasped by the assistant, who makes the tendo Achillis tense, and the knife of the operator introduced flatwise is turned against the tendon, which is cut with a snap. This allows the foot to be pulled into position, and there can be felt as much as an inch of space between the two ends of the severed tendon; which interval will subsequently become occupied by analogous tissue uniting the parts.

The tendo Achillis is very often divided; but this case is somewhat different from usual instances, in that the extensors of the toes had to be cut, an operation not often required, though a very valuable procedure in certain classes of distortion. A pad is now placed over each puncture, and secured with adhesive strips, after which the whole foot is surrounded by a bandage.

*SERVICE OF MR. HENRY SMITH, F.R.C.S.*

*TREATMENT OF HEMORRHOIDS BY THE CLAMP AND EXCISION.*

This woman, when she entered the hospital, presented a very bad case of internal hemorrhoids; but to-day the tumors are smaller and less inflamed, because she has been kept quiet in bed for some time past. Nothing short of some form of operative procedure will relieve her; and therefore the tumors shall be excised.

A leather band is buckled around her right wrist, and another to her foot, one band having a ring, the other a hook attached. The leg having been bent, the two bands are hooked together, thus holding the limb out of the way during the operation. The finger, introduced into the vagina, turns the hemorrhoids out of the anus so that they can be grasped by the forceps. When this is done, the ivory clamp is applied to the mass and screwed up, then the tumor is cut off with the scissors, and the actual cautery applied to the cut surface to seal up the vessels before the clamp is removed. Another mass is drawn forth, and the clamp applied, but, being small, it is merely seared with the iron without being excised first.

This having been done to three separate masses, an opium suppository is introduced. The bowels shall be kept quiet for four days, after which a cathartic shall be given; and in a week the patient will probably be discharged from the hospital.

This operation for the cure of hemorrhoids is simple, safe, quick, and effectual. The clamp consists essentially of two flat pieces of ivory arranged like a pair of scissors, with a screw which holds them firmly together when the pile has been seized between their edges. The object, of course, is to prevent hemorrhage after the excision, and to protect the adjacent parts during the application of the cautery. By this method the ordinary dangers of the operation are avoided, for hemorrhage is prevented, and there is no danger of pyæmia, because the mouths of the vessels are sealed up by the cautery.

In four or five hundred operations Mr. Smith has never had a case of pyæmia, and has never been obliged to plug the rectum for hemorrhage.

It has been asserted that stricture is likely to follow this operation. This might be so if a large portion of skin were cut away; but only the mucous membrane should be excised. Mr. Smith has never seen a case where stricture followed; and in one case, where, after death from another cause, an examination was made, no stricture whatever was found. In those instances in which it is necessary to excise a large portion of the skin, it is well to use the bougie to dilate the orifice during the after-treatment, and thus to prevent the occurrence of contraction.

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Immovable Apparatus in Acute Articular Rheumatism.—Dr. S. Scapari concludes from his experience that immovable apparatus made either with plaster of Paris, silicate of potassium, or starch, are exceedingly useful when applied to the affected joints in acute articular rheumatism, although they certainly have no influence upon the disease itself. If on the appearance of the first symptoms these applications are made to all the joints, sound and affected, they seem to exercise an abortive effect, preventing the appearance of the affection in some of the joints, and calming and arresting the manifestations already developed in others. Dr. Scapari even goes so far as to assert that the spread of the disease is diminished, as well as the probability of concomitant complication on the part of the serous membranes, the heart, and the lungs.—*Bull. Gén. de Thérap.*, No. 10, 1875; from *Raccoglitore Medico*, No. 3, 1875. X.

PHILADELPHIA
MEDICAL TIMES.
A WEEKLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

*The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.*

*We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.*

*All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.*

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SATURDAY, JULY 10, 1875.

## EDITORIAL.

### CHEAP JOHN.

WE once heard an anecdote of a celebrated German millionaire who, when asked at a dinner in London to select between some tempting Southdown and a fine haunch of venison, curtly replied, "I never takes the deer when I can have the *sheep*." Our medical confrères across the Alleghanies evidently endorse the above views.

Some attentive friend has sent us a flaming annual announcement and catalogue of the Missouri Medical College, Session 1874–75, cover "couleur de rose," full of promise, we will hope with no lank performance.

This announcement savors of the modern display-advertisement style, and we looked for the mysterious four-leaf clover with which a certain ingenious firm inveigle the *imberbis juvenis* of our country. We have no doubt that the opportunities for clinics, the material for medical instruction, are all that are vouched for in this unique circular. We say circular, for the advertisements of certain hotels and peculiarly-colored passenger-cars induce us to fear that our shrewd confrères, to diminish the expense of the printer, have entered into a compact with certain proprietors of hotels and stockholders of passenger-cars. This, however, is only *business*. Our heartfelt, earnest protest is against the cheapening of medical education, of which this announcement is a remarkable characteristic:

"The faculty have for thirty years maintained the old fee of $105. They have done this up to *last* year, notwithstanding the schools in every other city west of the Alleghanies reduced them years ago. At a recent meeting of the representatives of the faculties of many of these schools, in Detroit, the Missouri Medical College again advocated the old rates, but the schools which first reduced them declined to make any change. In reducing the fee, the faculty have placed the superior advantages of this school in reach of many who have hitherto been deprived of them by pecuniary considerations. They, therefore, do so *cheerfully*, and at a time the most prosperous in the history of the College. Fee for full course of lectures, $50."

O tempora! O mores! Such are the results of twenty years' labor of the American Medical Association! Such is the trans-Alleghany endorsement and appreciation of the untiring, self-sacrificing efforts of one of the oldest medical colleges of our country to double her corps of professors, to increase the number of her chairs, to raise the standard of preliminary examinations, to extend her curriculum,—in other words, to raise the status of the medical profession, and to send forth sound physicians, polished gentlemen, conscientious men.

In the dim future, should our Western brethren still persist in their levelling propensities, we may look forward to an annual announcement of some medical school appended to Jayne's Almanac, with the following programme:

"THE OI POLLOI MEDICAL COLLEGE, SESSION 1884–85.

"Anatomy, physiology, practice of medicine, surgery, obstetrics, and materia medica at prices to suit the times.

"Dissecting-room tickets half-price; babies alone dissected. Hospital and quizzes gratis.

"Tickets to the college, in yellow-colored cars, gratis. Meals provided at the 'Great Hygienic Hotel,' in Red Lane.

"Students forming clubs of ten taken at reduced prices. Married students are permitted to substitute their wives as attendants upon the lectures at their option. Students may still further diminish their expenses by offering themselves or members of their families, when indisposed, as subjects for the clinics. Should any student fail to pass his examination, fee refunded. The faculty, however, pledge themselves never to place their candidates in so embarrassing a position. Prof. Shrewdem will, at his convenience, give a lecture on the American view of the Monroe doctrine, in opposition to the late Professor Munro, of England."

"Spectatum admissi risum teneatis, amici?"

## LEADING ARTICLE.

### THE VIENNA TREATMENT OF UTERINE HEMORRHAGE.

DR. CARL v. ROKITANSKY, Jr., may fairly be regarded as a representative of the German, or at least of the Vienna, school of gynæcology. If we examine, therefore, his most recent utterances on the subject,* we may expect to get a reasonable idea of what advances our German brethren are making in the treatment of this class of affections, and wherein their methods differ from our own.

Two indications for treatment in general are pointed out by Dr. Rokitansky: first, to stop the excessive hemorrhage of the moment; second, to prevent its return. The general treatment to fulfil these indications must consist in the exhibition of repressive medicaments and in the administration of a proper regimen, while the local therapeutics should be directed towards a pharmaceutic effect upon the vaginal or uterine mucous membrane on the one hand, and against the exciting causes of bleeding in the uterus on the other.

One of the most important points in the treatment of uterine hemorrhage is rest,—rest in the horizontal position, with raised hips, the coverings not too warm, no movement, not even in emptying the bladder or rectum. All excitement is to be avoided; the food and drink are to be of the simplest character: roast meat and ice-cold soda-water are the best nourishment. The chamber should be kept at an even temperature and supplied with plenty of fresh air. Everything which can cause congestion of the pelvic organs is to be avoided.

In what is called active uterine hemorrhage, particularly metritis hæmorrhagica, cold in all forms is to be avoided, because, while its transitory application tends to cause congestion, its continuous employment is not to be thought of. The application of frequently-changed cold compresses to the abdomen is, however, to be recommended. In these cases the plentiful application of leeches to the lower portion of the abdomen, or even to the vagina itself just before the menstrual period, is often extremely effective. In light cases these means, combined with mild laxatives and tonics, will place the patient in an improved position; and these precautions should be taken by all women liable to hemorrhage at the menstrual period.

In menorrhagia, which is simply the expression of general debility, marked improvement follows the use of tonics, and particularly preparations of iron. When the loss of blood is not due to uterine disease, improvement of the skin's action, strengthening of the general health, and regulation of the bowels aid greatly in the cure. A systematic course of hydro-therapeutics is often of great benefit in these cases. In all severe cases of profuse hemorrhage, which tend rapidly to anæmia, it is indispensable, during the intervals, to stimulate the strength of the patient to the utmost degree possible.

In what is called passive hemorrhage, which is by far the most usual form of profuse menstruation, and which, by lasting weeks, or even months, brings the patient almost to dissolution, cold may be used with propriety. This means, however, frequently fails, and the physician is constrained to employ pharmaceutical or occasionally mechanical applications to the uterine mucous membrane. The medicaments used for this purpose are astringents, or more usually caustics. These are used in the solid or the fluid state. The use of powders has been of late almost entirely given up. Of the various medicaments, none can replace nitrate of silver. The others are usually tardy in their action, and often produce untoward symptoms (as the uterine colic brought on by the mixture of alum and sulphate of copper).

Whether or not the speculum is used in making these applications, their use should always be preceded by examination with the uterine sound, in order to ascertain as exactly as possible the situation, the condition, and the irritability of the uterus.

Dr. Rokitansky recommends the use of the lunar caustic in considerable quantity: if a small piece is used it is wasted in coagulating the blood, and does not reach the mucous membrane itself. He never uses the caustic until the cervix has been dilated. Slight pain is caused by its use, which usually lasts only a few minutes, occasionally an hour or so. Nausea, and even vomiting, may occur. Very exceptionally the pain may last a day or so, or give rise to feverishness. Dr. R. has only in a single case observed the supervention of dangerous symptoms. One precaution should be observed, particularly in walking cases,—that is, not to cauterize too energetically the first time. The irritability of the uterus should first be tried, and if there is a tendency to uterine colic it should gradually be accustomed to the application.

As to the method of applying the caustic: after the cervix is dilated sufficiently, and the uterine axis brought as nearly into a normal position as possible, a stick of caustic, perhaps an inch long, is introduced by a sidewise motion, either by means of forceps or on the end of a quill from which, after the caustic is placed in position, the latter is broken off. The introduction must be rapid, or the inner cervix may close before the caustic is completely introduced.

A cylindrical speculum of hard rubber is preferred by Dr. Rokitansky, who advises also that no effort be made at forcing it into position. If, for any reason, this cannot be employed, a "porte-caustique" or "uterus pistole" may be used. In most cases cauterization one, two, three, or four times every second, third, or fourth day will control the hemorrhage. Relapse may be prevented by the use of extract of ergot. Digitalis, tincture of cannabis Indica, rue, savin, etc., are nearly useless.

Two methods of cauterization with fluids may be used: either cotton-wool soaked in the medicament and introduced by any of the ordinary instruments through a rubber speculum, or intra-uterine injection. The latter method is highly praised by many authors, who, at the

* "Ueber Gebärmutterblutungen und deren Behandlung," *Wiener Klinik*, 1 Jahr., 4 Heft, April, 1875.

same time, warn against the evil effects which may easily follow. The best guarantee against such effects is the continuous patency of the entire cervical canal, and this can best be obtained by previous dilatation with sponge tents or laminaria. This of course allows free exit to the injected fluids, and prevents the danger of their being forced into the Fallopian tubes. In addition to this precaution, it is necessary to inject no more than three, four, or at most six drops at any one time, and to inject only very slowly, and drop by drop. By this means the danger is reduced to a minimum.

These injections, as well as any kind of cauterization of the uterus, are to be avoided only when there are inflammatory processes in the uterus or its adnexa, or in its immediate neighborhood. Version or flexions of the uterus are not to be regarded as contra-indications, but call for the greatest care. Among medicaments, neutral liquor ferri sesquichlor. and tincture of iodine are the best.

When the porte-caustique is used, the patient should lie on her back, with the hips elevated. In making the application by other means, the position may be any of those usually taken. The vagina should be protected by a tampon of cotton-wool slightly impregnated with glycerin.

Recently injections of hot water have been recommended in post-partum hemorrhage by Dr. Windelband; but these have not yet been fairly tried.

Among the mechanical means of arresting hemorrhage, the sponge tent is the most prominent. For instance, if the usual means of controlling uterine hemorrhage fail and a polypus is suspected, the first thing to do is to dilate the cervix and make an examination. Occasionally the use of the tent a single time will in itself put an end to the bleeding; and if the pressure is directly upon some excrescence, this may disappear, removing at once the hemorrhage and its exciting cause.

Dr. Rokitansky only uses the sponge tent in cases of extreme necessity, and never leaves it longer than six, or at most eight, hours in position.

As to tamponing the vagina with cotton, charpie, etc., impregnated with liq. ferri sesquichlor., this procedure rarely has any lasting effect; and if these tampons are left too long in position, infection, or at least local irritation, may result. Colpeurynters filled with ice-water are better; but where the physician is suddenly confronted with immediately threatening hemorrhage, tamponing as above may be an absolute necessity.

In cases of uterine fibroid when removal cannot be performed, dilatation of the cervix with injection of tinct. iodinii may prove serviceable.

Finally, the hypodermic injection of ergotin is very useful when the hemorrhage proceeds from uterine fibroid.

When the cause of hemorrhage is to be traced to polypoid growths, these must be removed, if they can be reached by instruments. When they are not attainable, injections of ergotin and the cold douche may be used. Dilatation of the cervix by sponge tent is not to be resorted to unless the strongest necessity exists. Cancerous growths are to be removed by the galvano-cautery, the sharp spoon, or the actual cautery, followed, when the eschar falls, by Wynn Williams's solution (one part bromine to five parts alcohol). When cancerous nodules still remain after this last operation, the bromide solution may be injected directly into the parenchyma of these tumors.

## CORRESPONDENCE.

New York, June 25, 1875.

A REMARKABLE case of aortic aneurism has lately attracted considerable attention at the Roosevelt Hospital. The patient was a German, 40 years of age, a stevedore by occupation, and admitted to the hospital for the first time in August, 1874. Seven months previous to this date he had fallen through a ship's hatchway, striking upon his back, and probably receiving some internal injuries. He complained of severe pains in the chest, but there was no evidence of any spinal trouble, so far as could be ascertained. After a few days' rest he was able to return to his usual avocation; but in a short time he was obliged to give up continuous work. Up to the time of his admission, however, he was still able to work for a day or two at a time occasionally. When first examined, a distinct tumor was found in the region of the first and second costal cartilages, on the right side, and he complained of constant pain about the sternum and between the scapulæ, behind.

He remained in the hospital, without much change in his condition, until November 9, when he was discharged at his own request. He was re-admitted February 13, 1875, having continued to suffer during the interval from severe shooting pains in the anterior portion of the chest, and a dull, burning pain in the upper part of the spine. The tumor had somewhat increased in size, and a distinct thrill could now be detected in it. About the 1st of June its upper surface began to grow red and tense; and on the 13th it broke spontaneously, and discharged a considerable quantity of pus mixed with dark-colored blood.

On the 19th, the discharge of purulent fluid was enormous, and the patient was rapidly becoming exhausted. About three o'clock that afternoon there was a rupture of the aneurism beneath into the superficial alveus. The house-physician immediately applied a compress, and summoned Dr. Weir, the visiting surgeon, who happened to be in the hospital at the time. By forcible compression with oakum saturated with persulphate of iron solution, the hemorrhage was entirely controlled in about fifteen minutes; but, as the patient's pulse was 144 and his exhaustion extreme, his death apparently could be only a matter of a few hours at the farthest. His condition, however, afterwards improved, temporarily, so that he actually lived until 5.30 on the morning of the 21st.

The autopsy was made the same day, in the presence of Drs. William Draper (in whose service the case occurred), Erskine, Mason, Weir, McBurney, and others.

The heart was found not to be greatly displaced, the apex being about two inches to the left of the median line. This was probably owing to the fact that the left lung was everywhere bound down by firm adhesions. The left pleural sac contained about one and a half pints of sero-purulent fluid. The whole arch of the aorta was found to be affected. Just to the right of the origin of the innominate artery an opening of the size of a small pipe-stem was seen, communicating with an alveus under the sternum; and this had, no doubt, been the immediate cause of death. At a point corresponding to this, the manubrium of the sternum was very badly eroded. The original or main aneurismal sac was situated in the transverse portion of the arch, and on its lower aspect, just opposite the mouths of the innominate, left common carotid, and left subclavian arteries. These arteries were not compressed or affected in any way, and thus the marked regularity of the radial pulse on both sides, which had been noticed, could be accounted for. The distended cavity of the aorta at this point would probably have admitted a moderate-sized fœtal head. The sac was filled with soft clots, and over the greater portion of its internal surface old layers of fibrin were deposited. Its walls were everywhere thick and firm.

The descending portion of the arch was so firmly adherent to the vertebræ that it was much lacerated in removing it from the thorax. There were extensive caries and erosion of the second, third, and fourth dorsal vertebræ, and of the corresponding ribs; one of the latter being almost entirely eaten through. The right lung, except being somewhat œdematous, was normal. The left bronchus had been strongly pressed upon, and a section of the left lung showed that it was firmly compressed, and everywhere riddled with abscesses, there being several cavities in it of the size of a walnut.

It is certainly very remarkable that a man should live for thirty-six or thirty-seven hours after the opening of an aortic aneurism; but this is less to be wondered at when we remember that the perforation was caused by ulcerative action, from the external abscess, and not by a proper rupture of the sac, from progressive thickening of its walls; which, of course, almost always necessarily results in instant death.

A month or two ago, a patient at Bellevue is said to have lived for twelve hours after the rupture of an aortic aneurism; but we are not acquainted with the facts of the case.

Since the date of our last letter, the Harlem Flats nuisance has occupied a still greater share of public attention. The white-washing report of the police surgeons has been repudiated by several others of their number, and innumerable have been the petitions, meetings, resolutions, investigations, and letters, to say nothing of the conferences of mayor, aldermen, health commissioners, and commissioners of public works, in regard to the matter. As a result of all this, it was hoped that the grand jury would take some action; especially after a protest had been presented to them, signed by a large number of physicians practising in the neighborhood of the infected district, and confirming the worst that had been said of the baneful influences of the refuse deposited on the flats; but they declined to interfere in the premises.

Still, the filling-in with refuse matter has been stopped, and the commissioner of public works requested by the board of alderman to cover the flats with a thick layer of pure and wholesome earth.

In the mean while, the health department has been endeavoring to disinfect the pestiferous region with copperas and "dead oil" from the petroleum works at Hunter's Point; but as it is almost a herculean task to deodorize a deposit extending over such a large area, which to a large degree consists, according to reliable medical authority, of apples, oranges, turnips, carrots, pea-shells, potato-peels, hay, straw, manure, and dead dogs and cats, the odoriferous stench still smelleth unto heaven, if one can believe the reports of the unhappy residents of the vicinity.

It is gratifying to know that some of the churches here have been taking up collections for a "fresh-air fund," to provide for short excursions by land or water for the poor during the summer, and a residence of one, two, or three weeks out of the city for those who are most enfeebled. The lead in this matter has been taken by the rector of the Anthon Memorial Church, Rev. Heber Newton, son of Dr. Richard Newton, of Philadelphia, and it is his aim eventually to establish a permanent summer home for the worthy poor, under the auspices of his church.

Nearly $11,000 has been contributed towards the Floating Hospital of St. John's Guild, but $20,000 is needed to complete a barge capable of accommodating twenty-five hundred sick children and mothers. In a recent appeal to the public, the trustees say, "No plan for the relief of the sick children of the poor has more practical advantages than the proposed hospital barge. The pure, invigorating sea air, wholesome food, medical attendance, kind nursing, roomy quarters, and healthful recreation, are, through this method, placed at the disposal of both mothers and children, and the time so arranged that the necessary household duties will not be infringed upon. Over fifteen thousand children and mothers were taken out on the eighteen excursions given by the Guild last summer, while hundreds had to be refused for want of the necessary accommodations, which the present effort is intended to remedy. Now the work is to be carried out on a larger scale, and with results, it is hoped, that will tell beneficially upon the health of the entire city."

As a result of the joint meeting of the Public Health and Dwelling Reform Associations, at which Dr. Stephen Smith advocated the increase of suburban homes for working-men, a committee, consisting of Mr. Parke Godwin, Hon. D. B. Eaton, Prof. C. F. Chandler, and Dr. Smith, has addressed a circular letter to the presidents and directors of railroads radiating from this city, to urge the inauguration of a system of cheap morning and evening trains for working-people.

The Park Hospital, near the City Hall, having been

abandoned on account of the insecurity of the building, there is now no adequate house of relief for cases of sunstroke and other accidents in the lower part of the city; and, in view of the advent of hot weather, the Governors of the Society of the New York Hospital have requested the Mayor and Sinking Fund Commissioners to appropriate one of the late station-houses in Beekman or Chambers Street for such a hospital, promising to fit up the building, as well as care for the patients received, at their own expense.

Notwithstanding the energetic labors of the extra corps of vaccinators appointed by the Board of Health, smallpox still continues to prevail, one hundred and twenty-eight cases having been reported during the week ending June 29. The smallpox hospital on Blackwell's Island is entirely filled, and, in addition, quite a number of tents have been erected outside for the accommodation of convalescents. Diphtheria also continues epidemic in the city, over a hundred cases being reported for the same week.

The managers of the Presbyterian Hospital seem at last to appreciate that the profession is in earnest in its demand for an explanation of their late extraordinary action, and have called a special meeting of their board to take into consideration the present state of affairs. Not only have the four newly-appointed physicians resigned, but almost the entire staff of visiting physicians and surgeons are also said to have handed in their resignations.

PERTINAX.

## PROCEEDINGS OF SOCIETIES.

### PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, APRIL 22, 1875.

THE PRESIDENT, DR. WM. PEPPER, in the chair.

*Sponge-like bodies from synovial cyst in a cow.*

DR. J. C. WILSON presented a number of small bodies evacuated by the spontaneous opening of a large synovial sac on the leg of a cow. These bodies were irregularly spherical in shape, and ranged from a quarter to a half inch in diameter. They looked like small pieces of soft, white sponge. The cyst which contained them was a large one, and had existed four years, without, however, producing lameness. It burst whilst the animal was in the stable, and the quantity of these sponge-like masses that fell out amounted to a quart. A little clear gummy liquid escaped with them. When fresh, they had a strong alkaline odor.

THURSDAY EVENING, MAY 13, 1875.

The PRESIDENT, DR. WM. PEPPER, in the chair.

*Double monster.*

Dr. LOUIS A. DUHRING presented, for Dr. E. E. MONTGOMERY, a double monster, described in the *Philadelphia Medical Times* for May 1, 1875.

*Aneurism of the abdominal aorta.*

Dr. W. G. PORTER presented the specimen, obtained at a post-mortem which Dr. P. made for a fellow-practitioner about three weeks ago. The history was as follows:

"He was called to see the patient, a man about fifty-seven years of age, about a week before his death, and found him suffering from tympanitic distention, colicky pains, constipation, and vomiting. Under treatment the vomiting and constipation were relieved, but the tympany, though somewhat modified by treatment, still remained, and the patient, who was an old drunkard, sank, and died exhausted."

*Post-mortem.*—The whole aorta from the heart downwards was the seat of extensive atheromatous change, the artery feeling more like an egg-shell than anything else. Just below the diaphragm a large aneurism was found, almost filled with laminated fibrin; it had eroded three of the vertebræ, and, rupturing on its posterior aspect, had formed a large false aneurism, and had filled the whole of the left side of the pelvis.

*Multiple cavernous angeioma of the liver.*

Dr. R. M. BERTOLET presented the specimen, and furnished the following history:

"This unusually fine specimen, unique among the presentations to this Society, was removed from Patrick S., a laborer, æt. 50, a native of Ireland. He died upon April 30, two days after his admission into the medical wards of the Philadelphia Hospital. He was carried off by an acute croupous pneumonia of the right upper lobe; during his illness there was no hepatic tenderness, nor any jaundice, or other symptom manifested to call especial attention to the liver.

"The autopsy, however, disclosed six large dark-bluish spots of considerable size, some of them measuring over an inch and a half in diameter, scattered through both lobes of the liver. These growths are seated in both the anterior and posterior surfaces, most abundantly towards the lower free margin. Their conical or wedge-shaped appearance upon section, as well as their peculiar coloration, led them to be mistaken upon first sight by the resident physician for hemorrhagic infarctions. This mistake is, no doubt, frequently made, since the liver is unquestionably the most favorite seat for these tumors; yet in this site they so far remain unrecorded in our proceedings. A careful inspection with the unaided eye, however, suffices to show that they are actual new growths, with a thin, whitish, reticulated net-work running through them and forming small angular meshes, the cavities of which are filled with dark, coagulated blood; the whole giving to the cut surface an appearance not unlike the alveolated structure of the lungs. The blood can be readily squeezed out from the spongy, cut surface, when the reticulated structure becomes still more evident. In this specimen the tumors, although most of them are directly under the capsule, do not project or bulge above the general level of the surface, excepting one of the largest, which is seated in the lower border, and there presents slight elevations both upon the anterior and posterior surfaces. The centre of each growth further presents a dense, broad band, looking not unlike an obliterated and thickened blood-vessel.

"Formerly, the term 'fungus hæmatodes seu spongiosa' was applied to these growths, but it has also been bestowed upon cancerous, sarcomatous, and other malignant tumors whenever they presented an unusually vascular appearance, thus leading to much deplorable confusion. Virchow was the first to designate those growths as *angeiomas* which are formed by a hyperplasia and ectasia of the capillary loops of the blood-vessels in a circumscribed locality. When, as always happens in the liver, these vessels are so distended as to form large sinuses or mere vascular spaces, then we have presented a structure the physiological paradigm for which is found in the corpus cavernosum of the penis, and which is now designated as the *cavernous* form of angeioma.

"Microscopically, the accompanying slides present

an appearance so closely corresponding with the admirable delineation given by Frerichs* that I doubt whether a more accurate drawing for these specimens could have been made. Under higher powers, it becomes evident that the vascular spaces are lined with a single layer of endothelial cells; while the meshes are seen to consist of a dense fibrillated connective tissue, with few cellular elements. Smooth muscular fibres and a certain amount of elastic tissue also aid in forming the bulk of the whitish septa. Enormously dilated blood-vessels, whose thickened walls together with connective tissue form the irregularly-shaped meshes, may, therefore, be said to constitute these tumors. The peripheral portions are by far the most interesting, for we are enabled not only to observe how the adjacent hepatic cells undergo fatty metamorphosis and gradually disappear under the encroachments of the tumor, but here, also, the actual steps in their development can be readily studied. The larger growths in this specimen are not surrounded by well-defined capsule, as sometimes happens, and as is the case in the numerous small cystic angeiomas to be referred to presently; but there are seen, here and there, bands of connective tissue extending between the acini. These bands, both in position and appearance, resemble the cicatricial tissue observed in advanced cases of cirrhosis, with this difference, that the one is circumscribed, while the other is diffused.

"The offsets from these angeiomas are extremely vascular; even in them the capillaries are beginning to widen. This teleangeiectasic condition is also possessed in common by the cirrhotic tissue, as has been recently pointed out by Cornil† and Rindfleisch.‡ A localized interstitial hepatitis is, therefore, the preliminary process, while the granulating connective tissue formed thereby, being unusually rich in blood-vessels, presents the most favorable conditions for the subsequent development of the angeiomatous growths. This predisposition to the formation of sclerotic tissue is, in this specimen, certainly a localized one, for sections made through the hepatic tissue at some distance from the tumors fail to reveal even the earliest stages of indurative interstitial hepatitis.

"From injections that I have formerly made upon other specimens of hepatic angeiomas, I am fully convinced of the correctness of the disputed statement that they can be filled only from the branches of the hepatic artery and portal vein, and that the lumen of the branches of the hepatic vein becomes compressed and obliterated. The multiplicity of these growths is a very ordinary occurrence, but it is extremely rare for them to attain the size of a walnut,§ which is certainly exceeded by several of the tumors in this specimen.

"The interest in this liver, in addition to the tumors already mentioned, is heightened by the presence of numerous (I have counted over fifty) small cystic formations. These vary in size from that of a pin's head to a small pea. They are generally filled with fluid blood; have a distinct limiting capsule; are clothed with endothelium, and frequently present slight ridges upon their interior surfaces.

"These cysts are scattered over the entire surface of the organ, and but few of them are concealed beneath the surface. Their endothelial covering, alongside of their contents, indicates their origin from the blood-vessels, perhaps by simple dilatation, but more probably also by the atrophy of the septa, the remains of which are seen as ridges upon the inner walls. Such an interpretation has been given by R. Volkmann,‖ in a case of *angeioma cavernosum hæmatocysticum nymphæ*, and I think can also be accepted here. The minuteness of some of these cysts led me to hope that it would be possible to ascertain in what part of the territory of the acini they first begin to develop. Unfortunately, this could not be definitely determined in the absence of any injection, which had been rendered impossible by previous mutilation.

"Clinically, it is, of course, impossible to diagnose these hepatic angeiomas, and Frerichs states¶ that he knows of no case in which they have given rise to local or general disturbances. Angeiomas sometimes, however, lead to the development of melanotic sarcoma, and then become highly malignant, a by no means rare occurrence when they are seated in the skin."

The PRESIDENT believed that the specimen was the first one of angeioma of the liver ever presented to the Society,—at least with a definite description of the lesion. It is very rare, at least, to find multiple lesions of this kind. He was able to recall two cases, in both of which the tumor was at the border of the liver, and triangular in shape. One was at least two inches in diameter, the other smaller, but both projected beyond the surface of the organ. The resemblance to hemorrhagic infarctus was more superficial than real, as the surface on a fresh section reveals to even slight examination the characteristic reticulum.

Dr. BERTOLET said that eight days ago he had met with a single angeiomatous tumor in the liver, also in a male subject of advanced years. Out of an equal number of post-mortem examinations, he thought they were more numerous in a late than in an early period of life. He recalled but one or two cases recorded where there were any decided projections from the surface of the organ; but, as a rule, the seat was somewhat depressed. Those which caused a protuberance were seated in the lobus Spigelii.

The PRESIDENT replied that the protrusion was not excessive; but in passing the hand over the convexity of the liver it was appreciable. He thought that the surface of the growth was one-third of an inch above the surface of the hepatic tissue. The reticulum was very loose, and the meshes exceedingly large.

*Chylous fluid from a hydrocele.*

Dr. H. LENOX HODGE presented the specimen, for Dr. C. H. MASTEN, of Mobile, Alabama, who furnished the following history:

"It may prove interesting to the members of the Pathological Society to examine the accompanying specimen.

"The history of the case is briefly as follows: W. H. W., a native of Mobile, aged 22 years, robust in health, five feet eleven inches high, one hundred and fifty-seven pounds in weight, bilious temperament, black hair and eyes, dark complexion, presented himself on the 18th of October, 1874, to be treated for 'hydrocele.'

"He stated that some eight years ago he had first noticed an enlargement of his scrotum, which, however, did not give him any inconvenience, and that it was not until about four years ago that he considered it necessary to seek medical advice upon the subject. Then he was 'tapped' by his medical adviser, and (to use his own language) 'a quantity of milk was drawn out.' Subsequently he was tapped on several occasions, but no treatment instituted for a permanent cure. To satisfy myself of the nature of his affection, I at once introduced a trocar, and, to my astonishment, I drew off f℥viii of a white fluid, which, to all appearances, resembled '*milk*.' As the case was a novel one, at least to me, I concluded to send a specimen of the fluid to my friend Dr. James Tyson, of Philadelphia, for his examination and opinion.

* Klinik d. Leberkrankheiten, Atlas., Taf. VI. Fig. 5.
† Archiv. de Physiologie, Mars et Mai, 1874, p. 272.
‡ Lehrbuch d. Path. Gewebelehre, 2 Aufl. S. 417, Fig. 145.
§ Virchow, Geschwülste, Bd. iii. S. 392.
‖ Archiv f. Klin. Chirurgie, Bd. xv. p. 568.

¶ Leberkrankheiten, Bd. ii. S. 214.

"The following extract from his letter, of date Philadelphia, October 25, 1874, gives the result of his examination:

"'The specimen is alkaline in reaction, sp. gr. 1015, highly albuminous, and appears to be made up, as determined by microscopic examination, of innumerable molecules, which are mere points under a power of four hundred diameters, together with a limited number of small granular cells, somewhat smaller, but otherwise resembling the colorless corpuscles of the blood, floating in a serous fluid.

"'Its physical characters are precisely those of *chyle*. Chemically, I find it almost completely dissolved by ether, and, after evaporation of the latter, to leave a cream-like mass. There were no spermatozoids whatever.

"'The fluid is not only in its physical but in its chemical characters comparable to chyle, and I believe its origin to be similar to that of chylous urine so called, which is probably due to the leakage of a lymph-vessel into the bladder.'

"'So here there is, probably from some cause, a similar leakage from a lymphatic into the hydrocele sac. . . . A similar case is reported by Vidal, and called "galactocele."

"'Our fluid was not examined for sugar; but, even with sugar present, I should compare the fluid to lymph or chyle, rather than milk, for it contained—

"'1st. The *molecular base*, with very few oil- (milk-) globules.

"'2d. The leucocytes, or chyle-corpuscles.

"'3d. The albumen.

"'Signed, JAS. TYSON.'

"Without speculating upon the case, I will simply state that I did not see my patient after the date upon which I evacuated the sac until the 1st of the present month, when he presented himself again, and requested that some operation should be done for his permanent relief, as he was contemplating a matrimonial connection and wished to be fully prepared for the occasion.

"The outlines of the operation I will mention, for the condition of the parts (as revealed by the operation) proves the correctness of the suggestion made by Dr. Tyson.

"On the 5th of April I cut down upon the sac, and then evacuated its contents through a canula. I found the same character and quantity of fluid as on the former occasion. After having discharged its fluid contents, I split open the sac and carefully examined its entire internal surface, for the purpose of detecting, if possible, the cause of the peculiar fluid. At the upper portion of the sac, just where it begins to be reflected backwards over the testicle, I discovered a small glandular-looking body, about the size of an ordinary pea, having very much the same appearance as the pouting granulations we often see at the opening of a fistula. The sac was very much thickened, and as dense and firm as the ball of an ordinary Davidson's syringe; it was smooth and polished on the inner side, showing no appearance of vessels. Slicing off this little body with a pair of scissors, I at once saw the mouths of some three or four vessels, *which did not bleed*, and which I believe were the mouths of the lymphatics, which had poured out this fluid.

"I dissected them back for a short distance, to see if they had any connection with either the cord or the gland, but found they were lost in the cellular tissue which surrounds the tunica vaginalis. I carefully tied the bunch of vessels with a small silk ligature, and brought one end out. Then, having cut away the front wall of the thickened sac, I coaptated its edges with some four or five delicate silk sutures, bringing to the outside a free end of the suture, and then closed the wound in the integuments with the pin-suture, ordered cold-water dressings, and left my case to heal, as I hoped it would, by primary union.

"On the fourth day I removed the pin-sutures, and found the wound in the integuments thoroughly united; and on the 10th of the month, just eleven days after the operation, I discharged my patient, as I hope, permanently cured.

"I am aware that it is not usual to treat hydrocele cases by excision of the sac, and then attempt to gain primary union; but in this climate the success of surgical operations is so very great, and the tendency to primary union so remarkable, that I felt justified in attempting the same in this case, as it was desirable to avoid all suppuration. There was very little inflammation following the operation, and, with the exception of some congestion and weight of the testicle (not more, however, than usually remains after an ordinary case of orchitis), I may pronounce my patient cured.

"I am pleased to report this case to the Society, not alone on account of its rarity and the interest which I believe it will afford, but because its results so fully sustain the views of Dr. Tyson as to its origin,—viz., 'a leakage of a lymphatic into the sac of the tunica vaginalis.'"

Dr. J. M. BARTON said he had been much interested in the preservation of this fluid in a specimen presented by him, and in the case of the specimen presented some time ago he had tried sulphite of sodium, carbolic acid, salicylic acid, and, finally, hydrate of chloral, with which he succeeded.

(To be continued.)

## REVIEWS AND BOOK NOTICES.

CYCLOPÆDIA OF THE PRACTICE OF MEDICINE. Edited by Dr. H. VON ZIEMSSEN. Vol. II. ACUTE INFECTIOUS DISEASES. By Prof. THOMAS, of Leipsic, Dr. CURSCHMANN, of Berlin, Dr. ZUELZER, of Berlin, Prof. HERTZ, of Amsterdam, and Prof. VON ZIEMSSEN, of Munich. ALBERT H. BUCK, M.D., New York, editor of American edition.

The second volume of this great work bears out in every way the promise of its predecessor. The different subjects have been assigned to writers each possessing peculiar fitness for the allotted task, and, we are glad to add, not too old to give it careful thought and assiduous research; the latter is especially evident in the authorities arrayed under each subject, some of the articles fairly bristling with bibliographical lore.

The subjects varicella, measles, and rubeola are treated by Prof. Thomas, the translation being by Edward Wigglesworth, Jr., M.D., of Boston. Prof. Thomas finds it necessary to combat the view of the identity of varicella and variola which is still held by some authorities, notably Hebra of Vienna. Measles receives considerable attention, the subject of anomalies and complications being treated at some length. We are inclined to believe that the mortality is estimated at a somewhat lower rate than recent accounts from Fiji would support. Rubeola, rötheln, or German measles is a disease which has not hitherto, we believe, found place in any systematic treatise upon medicine published in this country:* nevertheless the affection does occur here not unfrequently, as Dr. I. Lewis Smith† has shown, and Dr. Thomas's lucid account of it will be read with interest.

The article on scarlatina is also from the pen of Prof. Thomas, the translation being by Edward Frankel,

* We must except Drs. Meigs and Pepper's work on Diseases of Children, which contains a full account of the affection.

† Archives of Dermatology, October, 1874.

M.D., and John C. Jay, Jr., M.D., of New York. It is quite a book of itself, covering some one hundred and fifty pages. Under the head of treatment, especial stress is laid upon warm and cold baths and inunction, baths being recommended even in commencing nephritis.

Dr. Curschmann contributes a somewhat more concise article on smallpox, translated by George H. Fox, M.D., of New York.

Dr. Zuelzer's contributions comprise erysipelas, miliary fever, translated by Jas. C. White, M.D., of Boston, and dengue, influenza, and hay-fever, translated by I. Haven Emerson, M.D., of New York. As regards the etiology of erysipelas, Zuelzer is strongly inclined to attribute to it a fungous or bacterial origin. His description of treatment, local and constitutional, presents the usual array of vaunted specifics. He himself prefers the expectant plan combined with a nourishing diet. In the more serious forms with high fever he advises the use of the mineral acids with quinine: cold baths are also recommended. Locally, Zuelzer suggests merely the use of powdered starch and cotton wadding, together with perfect rest. Occasionally the surface may be painted daily with collodion to which glycerin has been added in the proportion of one part to fifteen, in order to prevent cracking. It forms a good covering and exerts mild compression. Ice-bags are recommended in severe cases.

The articles on miliary fever, dengue, influenza, and hay-fever are necessarily somewhat brief. Under the head of treatment of hay-fever the forlorn announcement is made, "Treatment is still powerless against hay-fever."

Prof. Hertz treats at length of malarial diseases, going into the subject of their geographical distribution and etiology with considerable detail. This article will perhaps prove one of the most interesting in the volume to American practitioners, particularly in the South and West. Its translator is found appropriately in the Mississippi Valley, in the person of Edward W. Schauffler, M.D., of Kansas City.

Prof. Von Ziemssen himself concludes the volume with a contribution on epidemic cerebro-spinal meningitis, translated by A. Brayton Ball, M.D., of New York.

Looking at the volume in its entirety, we must testify to the agreeable and easy style in which the various contributions have been written, making the book exceedingly pleasant reading. Much credit is due in this respect to the ability of the translators, and especially to the pains-taking fidelity with which the editorial portion of the work has been accomplished.

Some complaint has been made of the cumbrous size of the volumes of this work; but, although the one before us would hardly be found suitable for the "Leisure Hour Series," the inconveniences of its bulk are compensated in our mind by the clear and open type, and the almost creamy richness of the paper upon which it has been printed. A. V. H.

## SELECTIONS.

VALENTI Y VIVO ON THE ANTAGONISM BETWEEN STRYCHNIA AND MONOBROMIDE OF CAMPHOR.—Dr. Valenti y Vivo has made a series of researches on the supposed antagonism between these two substances, and has arrived at the conclusion that monobromide of camphor may be considered as an antidote for strychnia. According to Dr. Valenti, the following conclusions are well established (*Siglo Medico*, April 18, 1875):

1. Twelve dogs, after taking a fatal dose of strychnia, were saved by the use of bromide of camphor. The experiments were practised in a satisfactory manner, with crucial tests.

2. The tetanic convulsions produced by strychnia may be reduced in force and frequency by the use of bromide. The action of the antidote is rapid and sure.

3. The hyposthenic action of the bromide mitigates the reflex activity of the poison. The tonic convulsions are converted into clonic.

4. The physiological antagonism is comparatively limited. A strong dose of bromide of camphor is necessary to antagonize the effects of strychnia.

5. The bromide acts on the sympathetic nerve; this is demonstrated by the myosis and the cardiac paralysis which were observed after its administration.

6. After an overdose of bromide, the united effects of the poison and the antidote produce death by syncope; when death takes place during the strychnism and without the antidote, cardiac impulses are observed post mortem; when it takes place after and through the use of bromide, cardiac impulses are never observed.

7. The experiments show that it is preferable to introduce the bromide by gastric ingestion and in small and repeated doses. The subcutaneous method, employed in some experiments, has not given satisfactory results. —*London Medical Record.*

## GLEANINGS FROM OUR EXCHANGES.

CROUP AND DIPHTHERIA (*The St. Louis Medical and Surgical Journal*, June, 1875).—Dr. Edward Montgomery enumerates the following characteristics which prevent him from accepting the doctrine of the identity of croup and diphtheria:

Croup is mostly confined to infancy and childhood, while diphtheria may and does attack all ages. Croup is neither infectious nor contagious, whilst diphtheria is eminently so.

Croup generally comes on suddenly in the night, the patient having been apparently well on going to bed, whilst diphtheria is preceded by many hours of general *malaise*, with a gradual exacerbation of symptoms.

The course of croup is short,—often two days, and rarely exceeding four,—whilst diphtheria extends from seven to twenty days.

In croup there is no swelling of the throat or of the cervical glands, whilst both these phenomena are present in diphtheria.

In croup there is no fetor from the throat, in diphtheria there is a strong and disagreeable odor. In croup the false membrane is mostly confined to the larynx and trachea; in diphtheria it rapidly invests the whole mucous membrane of the throat, involving the air-passages and the nostrils, and often appearing in the œsophagus, anus, and vagina.

In croup the false membrane is lighter in color, not so thick, and when detached does not leave a deep eschar and does not form on wounds or abraded surfaces; in diphtheria the membrane is dense, dark-colored, when detached leaves a deep eschar which readily bleeds, and is apt to form on wounds or abraded surfaces.

In croup there is no dysphagia, and no fetid discharge from the throat and nostrils; in diphtheria swallowing is accompanied with great difficulty and pain, and a fetid exudation from the throat and nose is almost invariably present.

In croup there is seldom much albumen in the urine, and when present it is in the advanced stage of the disease; in diphtheria albuminous urine is the rule, and often quite extensive in the commencement of the malady.

Croup has rarely any sequel to be dreaded, whilst diphtheria is often followed by paralysis, loss of voice, dimness of vision, deafness, dysphagia, etc.

In croup there are not the severe constitutional symptoms, great prostration, and other signs of septic poisoning which so generally obtain in grave diphtheria.

In fully-developed membranous croup the majority of the cases are not affected by any medicines hitherto employed, whilst in diphtheria medical treatment can accomplish much good.

LARYNGEAL DISEASE IN RELATION TO PULMONARY PHTHISIS (*Transactions of Ninth Annual Meeting of the Medical Association of the State of Missouri*).—Dr. W. C. Glasgow reports the following interesting case as illustrative of the connection between the diseases of the throat occurring as a complication in pulmonary phthisis, and other manifestations of struma:

W. M., aged 16 years, seven years ago had a large strumous ulcer on the leg; this continued open three years; one year after healing of ulcer, another formed under the clavicle, which did not heal for two years; one year after healing, another formed on the forehead; several months after this had healed, he experienced trouble with his throat,—pain and difficulty of swallowing. When first seen, he was suffering from great dyspnœa and dysphagia,—the effort of swallowing causing great pain,—and the fluids, for he could swallow no solid food, were regurgitated through the nostrils. There was complete aphonia. A laryngoscopic examination showed complete destruction of the epiglottis to its base, great thickening of all the parts of the larynx, and œdema so great that the opening into the glottis presented a rounded form, not the usual oval presented by the cords. An examination of the lungs gave dulness over the left infraclavicular space, prolonged expiration, both inspiration and expiration of bronchial character, and numerous moist crackling râles; the right side anteriorly gave harsh respiratory murmur. He presented all the symptoms of pulmonary phthisis,—continued hectics, night-sweats, impaired digestion, and general bodily prostration, with loss of strength and weight.

Under local and constitutional treatment, the difficulty of swallowing ceased, respiration became free and natural, and all the local and constitutional symptoms disappeared except the aphonia, which remained unchanged. The larynx remained greatly thickened and distorted, but there was no impediment to respiration or deglutition. The respiratory sounds over the left lung assumed a broncho-vesicular character, and all signs of active irritation ceased. The patient regained strength and weight, and appears in good bodily health, with the exception of aphonia and a pustular eruption, which made its appearance several months after the active disease in the larynx had subsided, and which still continues, the pustules discharging a strumous pus.

EXTERNAL USE OF TURPENTINE IN THE TREATMENT OF TONSILLITIS.—In the *Leavenworth Medical Herald*, Dr. S. H. Roberts strongly recommends the use of turpentine externally in tonsillitis. He folds the flannel to four thicknesses, wrings it out in hot water, and pours oil of turpentine over a spot the size of a silver dollar. The flannel is then applied over the sub-parotid region, and the fomentation continued as long as it can be borne. After removal, a dry flannel is applied, and the same region rubbed with turpentine every two hours. This application is continued daily till resolution occurs. The doctor believes, from the evidence of his long experience, that thus applied early in the disease the oil of turpentine has almost a specific effect in tonsillitis. That its action is not simply that of an irritant he has proved by employing mustard, croton oil, tincture of iodine, etc., in the same class of cases. They always failed to diminish the inflammation of tonsils, while the turpentine succeeded.—*New Remedies*, April, 1875.

## MISCELLANY.

SOCIETY OF THE ALUMNI OF THE AUXILIARY DEPARTMENT OF MEDICINE OF THE UNIVERSITY OF PENNSYLVANIA.—The graduates of the Auxiliary Department of Medicine of the University of Pennsylvania who have received the degree of Doctor of Philosophy have organized an alumni association, and elected the following officers: President, Dr. Roland G. Curtin; Vice-President, Dr. De Forrest Willard; Corresponding Secretary, Dr. Edwin L. Evans; Recording Secretary, Dr. Charles K. Mills; Treasurer, Dr. John Guitéras; Executive Committee, Drs. George C. Laws, J. William White, Adolph W. Miller, George Kerr, Edward T. Bruen, John R. Partenheimer, James B. Walker, John R. Haynes, Robert Simpson, and Andrew Macfarlane.

The first annual meeting of the Society was held at the University on the afternoon of June 24, 1875. Resolutions were adopted instituting a "George B. Wood Prize" of fifty dollars, to be awarded to that graduate of the Auxiliary Department of Medicine who should pass the best examination and present the best thesis embodying original investigation.

ICE IN THE HOUSE.—The use of ice in small quantities frequently repeated is very general in many diseases, but it is generally found to be a difficulty to keep it from melting, especially in small blocks. Dr. Schwarz recommends, to obtain this result, that the ice should be put in a vessel covered with a plate, which vessel should be placed on a feather-bed and covered with a feather-pillow or cushion, feathers being very bad conductors of heat. Dr. Schwarz states that by this plan he has been able to keep six pounds of ice for eight days when the thermometer marked summer heat.

LADIES FOR LADIES.—Madame Brès, who last week read a thesis before the Paris Faculty of Medicine and obtained a doctor's degree, is reported to have been appointed physician to the Sultan's harem at Constantinople.

THE number of Professor Huxley's students in Edinburgh University now amounts to upwards of three hundred and fifty.

## OFFICIAL LIST

*OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY, FROM JUNE 29, 1875, TO JULY 3, 1875, INCLUSIVE.*

MIDDLETON, J. V. D., ASSISTANT-SURGEON.—Granted leave of absence for one month, with permission to apply for an extension of two months. S. O. 118, Department of Dakota, June 24, 1875.

GIBSON, J. R., ASSISTANT-SURGEON.—Assigned to duty at Fort Fetterman, Wyoming Territory. S. O. 73, Department of the Platte, June 26, 1875.

HUBBARD, V. B., ASSISTANT-SURGEON.—Relieved from duty at Jackson Barracks, Louisiana, and assigned to duty, temporarily, as Medical Director of the Department. S. O. 120, Department of the Gulf, June 25, 1875.

BROOKE, JOHN, ASSISTANT-SURGEON.—Granted leave of absence for one month. S. O. 130, A. G. O., June 30, 1875.